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NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2		"Ask CAS" for self-help around the clock
NEWS 3	Feb 24	PCTGEN now available on STN
NEWS 4	Feb 24	TEMA now available on STN
NEWS 5	Feb 26	NTIS now allows simultaneous left and right truncation
NEWS 6	Feb 26	PCTFULL now contains images
NEWS 7	Mar 04	SDI PACKAGE for monthly delivery of multifile SDI results
NEWS 8	Mar 24	PATDPAFULL now available on STN
NEWS 9	Mar 24	Additional information for trade-named substances without structures available in REGISTRY
NEWS 10	Apr 11	Display formats in DGENE enhanced
NEWS 11	Apr 14	MEDLINE Reload
NEWS 12	Apr 17	Polymer searching in REGISTRY enhanced
NEWS 13	Jun 13	Indexing from 1947 to 1956 added to records in CA/CAPLUS
NEWS 14	Apr 21	New current-awareness alert (SDI) frequency in WPIDS/WPINDEX/WPIX
NEWS 15	Apr 28	RDISCLOSURE now available on STN
NEWS 16	May 05	Pharmacokinetic information and systematic chemical names added to PHAR
NEWS 17	May 15	MEDLINE file segment of TOXCENTER reloaded
NEWS 18	May 15	Supporter information for ENCOMPPAT and ENCOMPLIT updated
NEWS 19	May 19	Simultaneous left and right truncation added to WSCA
NEWS 20	May 19	RAPRA enhanced with new search field, simultaneous left and right truncation
NEWS 21	Jun 06	Simultaneous left and right truncation added to CBNB
NEWS 22	Jun 06	PASCAL enhanced with additional data
NEWS 23	Jun 20	2003 edition of the FSTA Thesaurus is now available
NEWS 24	Jun 25	HSDB has been reloaded
NEWS 25	Jul 16	Data from 1960-1976 added to RDISCLOSURE
NEWS 26	Jul 21	Identification of STN records implemented
NEWS 27	Jul 21	Polymer class term count added to REGISTRY
NEWS 28	Jul 22	INPADOC: Basic index (/BI) enhanced; Simultaneous Left and Right Truncation available
NEWS 29	AUG 05	New pricing for EUROPATFULL and PCTFULL effective August 1, 2003

NEWS EXPRESS	April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN
NEWS WWW	CAS World Wide Web Site (general information)

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FILE 'HOME' ENTERED AT 13:59:51 ON 13 AUG 2003

=> file caplus
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'CAPLUS' ENTERED AT 14:00:10 ON 13 AUG 2003
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FILE COVERS 1907 - 13 Aug 2003 VOL 139 ISS 7
FILE LAST UPDATED: 12 Aug 2003 (20030812/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> "beta glusocidase"
       1204873 "BETA"
          1321 "BETAS"
       1204937 "BETA"
                 ("BETA" OR "BETAS")
             0 "GLUSOCIDASE"
L1           0 "BETA GLUSOCIDASE"
                 ("BETA"(W)"GLUSOCIDASE")

=> "beta glucosidase"
       1204873 "BETA"
          1321 "BETAS"
       1204937 "BETA"
                 ("BETA" OR "BETAS")
         14709 "GLUCOSIDASE"
          2579 "GLUCOSIDASES"
         15535 "GLUCOSIDASE"
                 ("GLUCOSIDASE" OR "GLUCOSIDASES")
L2        8080 "BETA GLUCOSIDASE"
                 ("BETA"(W)"GLUCOSIDASE")

=> "pyrrolidonyl arylamidase"
           141 "PYRROLIDONYL"
           680 "ARYLAMIDASE"
           138 "ARYLAMIDASES"
           704 "ARYLAMIDASE"
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                ("ARYLAMIDASE" OR "ARYLAMIDASES")
L3          7 "PYRROLIDONYL ARYLAMIDASE"
                ("PYRROLIDONYL"(W)"ARYLAMIDASE")

=> "leucine aminopeptidase"
        79765 "LEUCINE"
          582 "LEUCINES"
        80016 "LEUCINE"
                ("LEUCINE" OR "LEUCINES")
        12945 "AMINOPEPTIDASE"
         2567 "AMINOPEPTIDASES"
        13459 "AMINOPEPTIDASE"
                ("AMINOPEPTIDASE" OR "AMINOPEPTIDASES")
L4       4777 "LEUCINE AMINOPEPTIDASE"
                ("LEUCINE"(W)"AMINOPEPTIDASE")

=> L2 and L3
L5          2 L2 AND L3

=> L2 (l) L3
L6          1 L2 (L) L3

=> L2 and L4
L7         94 L2 AND L4

=> bacterial (w) detection
       211848 BACTERIAL
           26 BACTERIALS
       211867 BACTERIAL
                (BACTERIAL OR BACTERIALS)
       489109 DETECTION
         2313 DETECTIONS
       490464 DETECTION
                (DETECTION OR DETECTIONS)
L8       191 BACTERIAL (W) DETECTION

=> L8 and L7
L9          0 L8 AND L7

=> culture (w) medium
       334763 CULTURE
       187650 CULTURES
       445571 CULTURE
                (CULTURE OR CULTURES)
       635270 MEDIUM
         3396 MEDIUMS
       259276 MEDIA
          137 MEDIAS
       824213 MEDIUM
                (MEDIUM OR MEDIUMS OR MEDIA OR MEDIAS)
L10    66229 CULTURE (W) MEDIUM

=> L10 and L8
L11         4 L10 AND L8

=> DIS L11 1- IBIB ABS
YOU HAVE REQUESTED DATA FROM 4 ANSWERS - CONTINUE? Y/(N):Y
THE ESTIMATED COST FOR THIS REQUEST IS 9.66 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

L11  ANSWER 1 OF 4  CAPLUS  COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER:         2002:841798  CAPLUS
DOCUMENT NUMBER:          138:111824
TITLE:                    Development of an enzyme assay for rapid assessment of
```

JP 52154589	A2	19771222	JP 1976-70028	19760614

PRIORITY APPLN. INFO.: JP 1976-70028 19760614

AB A test sheet for **bacterial detection** is prepd. by pasting a microporous sheet and a porous, hydrophilic pad in which a **culture medium** is fixed in the dry state. Thus, a microporous sheet 0.11 mm thick with pores 0.9 .mu. in diam., and a filter paper 1 mm thick were pasted together by melting poly(ethylene) powder. The pasted sheet was stamped out to prep. a disk 37 mm in diam., which was steeped in a medium, dried at 4.degree. for 24 h, and sterilized.

L11 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1977:480876 CAPLUS
DOCUMENT NUMBER: 87:80876
TITLE: Medium for **bacterial detection**
INVENTOR(S): Nakajima, Takeo
PATENT ASSIGNEE(S): Nissui Seiyaku Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 52051086	A2	19770423	JP 1975-126533	19751021

PRIORITY APPLN. INFO.: JP 1975-126533 19751021

AB A capillary device is described that contains a medium the color of which changes in the presence of bacterial growth. The medium consists of peptone, NaCl, lactose, sugar, urea, and indicator contg. thymol blue, and a suspected bacterial sample is contacted with the medium and incubated at 37.degree..

=> DIS L6 1 IBIB ABS
THE ESTIMATED COST FOR THIS REQUEST IS 2.42 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1998:105990 CAPLUS
DOCUMENT NUMBER: 128:151440
TITLE: Method and medium for detecting vancomycin-resistant Enterococcus
INVENTOR(S): Chen, Chun-Ming; Edberg, Stephen C.
PATENT ASSIGNEE(S): Idexx Laboratories, Inc., USA
SOURCE: PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9804674	A1	19980205	WO 1997-US12806	19970724
W: AU, BR, CA, JP, MX				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9736720	A1	19980220	AU 1997-36720	19970724
EP 954560	A1	19991110	EP 1997-933566	19970724
EP 954560	B1	20021023		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
AT 226630	E	20021115	AT 1997-933566	19970724

US 6355449	B1	20020312	US 2000-597951		20000620
US 2002132285	A1	20020919	US 2002-58466		20020128
PRIORITY APPLN. INFO.:			US 1996-690196	A	19960726
			WO 1997-US12806	W	19970724
			US 2000-597951	A1	20000620

AB A microbe-specific medium for detection of vancomycin-resistant Enterococci in a test sample within 24 h and preferably within 18 h. The testing medium provides a selective growth medium for vancomycin-resistant Enterococci and includes specific nutrient indicators which only the target microbe can significantly metabolize and use for growth. The nutrient indicators contain a nutrient moiety and a detectable moiety linked together by a covalent bond. The nutrient indicators produce detectable signals only if the nutrient indicators are hydrolyzed by the Enterococci specific enzymes including .**beta**.-**glucosidase** and **pyrrolidonyl arylamidase**.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> DIS L5 1- IBIB ABS
YOU HAVE REQUESTED DATA FROM 2 ANSWERS - CONTINUE? Y/(N):Y
THE ESTIMATED COST FOR THIS REQUEST IS 4.83 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

L5 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:818318 CAPLUS
DOCUMENT NUMBER: 132:61227
TITLE: Comparative evaluation of five chromogenic media for detection, enumeration, and identification of urinary tract pathogens
AUTHOR(S): Carricajo, A.; Boiste, S.; Thore, J.; Aubert, G.; Gille, Y.; Freydiere, A. M.
CORPORATE SOURCE: Hopital Bellevue, Saint-Etienne, F-42023, Fr.
SOURCE: European Journal of Clinical Microbiology & Infectious Diseases (1999), 18(11), 796-803
CODEN: EJCDEU; ISSN: 0934-9723
PUBLISHER: Springer-Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Five chromogenic agar plates, CPS ID2 medium (bioMerieux, France), CHROMagar Orientation medium (Becton Dickinson, France), UriSelect3 medium (Sanofi Diagnostics Pasteur, France), Rainbow Agar UTI medium (Biolog, USA) and Chromogenic UTI medium (Oxoid, Germany), for the detection, enumeration and direct identification of urinary tract pathogens were compared using 443 urine specimens at two hospital labs. The enumeration of microorganisms was consistent on the 5 media for 403 of the 477 (84.5%) microorganisms. Chromogenic UTI, CPS ID2, UriSelect3, CHROMagar Orientation and Rainbow UTI gave detection rates of 98.3%, 97.9%, 97.3%, 96.9% and 94.1%, resp., with some problems in yeast growth occurring on Rainbow UTI agar and problems in Staphylococcus spp. growth occurring on UriSelect3. For the direct identification of Escherichia coli, sensitivities were 93.8%, 88.5%, 86.1% and 82.2% for CHROMagar Orientation, CPS ID2, UriSelect3 and Rainbow UTI, resp. Chromogenic UTI medium did not allow the accurate identification of Escherichia coli, since the indole reaction cannot be applied to this medium. Depending on the media, Enterococcus spp. could be identified at the genus or the species level. Slight differences were detected in the presumptive identification of the Proteus-Morganella-Providencia group and the Klebsiella-Enterobacter-Serratia group. Addnl., on Rainbow UTI agar, 12 of 20 Klebsiella pneumoniae strains and two of nine Pseudomonas aeruginosa strains were correctly identified. In conclusion, CPS ID2 medium and CHROMagar Orientation medium showed similar performance overall, while the UriSelect3, Rainbow UTI and Chromogenic UTI media require some improvement.

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1998:105990 CAPLUS
DOCUMENT NUMBER: 128:151440
TITLE: Method and medium for detecting vancomycin-resistant Enterococcus
INVENTOR(S): Chen, Chun-Ming; Edberg, Stephen C.
PATENT ASSIGNEE(S): Idexx Laboratories, Inc., USA
SOURCE: PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9804674	A1	19980205	WO 1997-US12806	19970724
W: AU, BR, CA, JP, MX				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9736720	A1	19980220	AU 1997-36720	19970724
EP 954560	A1	19991110	EP 1997-933566	19970724
EP 954560	B1	20021023		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
AT 226630	E	20021115	AT 1997-933566	19970724
US 6355449	B1	20020312	US 2000-597951	20000620
US 2002132285	A1	20020919	US 2002-58466	20020128

PRIORITY APPLN. INFO.: US 1996-690196 A 19960726
WO 1997-US12806 W 19970724
US 2000-597951 A1 20000620

AB A microbe-specific medium for detection of vancomycin-resistant Enterococci in a test sample within 24 h and preferably within 18 h. The testing medium provides a selective growth medium for vancomycin-resistant Enterococci and includes specific nutrient indicators which only the target microbe can significantly metabolize and use for growth. The nutrient indicators contain a nutrient moiety and a detectable moiety linked together by a covalent bond. The nutrient indicators produce detectable signals only if the nutrient indicators are hydrolyzed by the Enterococci specific enzymes including .**beta**.-**glucosidase** and **pyrrolidonyl arylamidase**.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> DIS L3 1- IBIB ABS
YOU HAVE REQUESTED DATA FROM 7 ANSWERS - CONTINUE? Y/(N):Y
THE ESTIMATED COST FOR THIS REQUEST IS 16.91 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

L3 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:246838 CAPLUS
DOCUMENT NUMBER: 138:35620
TITLE: Biochemical and susceptibility tests useful for identification of nonfermenting gram-negative rods
AUTHOR(S): Laffineur, Kim; Janssens, Michele; Charlier, Jacqueline; Avesani, Veronique; Wauters, Georges; Delmec, Michel
CORPORATE SOURCE: Microbiology Unit, Faculty of Medicine, University of Louvain, Brussels, B-1200, Belg.
SOURCE: Journal of Clinical Microbiology (2002), 40(3), 1085-1087

CODEN: JCMIDW; ISSN: 0095-1137
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Six hundred nineteen strains of nonfermenting gram-neg. rods were tested for alk. phosphatase, benzyl-arginine arylamidase, **pyrrolidonyl arylamidase**, ethylene glycol acidification, and susceptibility to desferrioxamine and colistin. The results were highly discriminant. Therefore, the proposed tests may be helpful for the identification of this group of organisms.
REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:918827 CAPLUS
DOCUMENT NUMBER: 137:121747
TITLE: Evaluation of a biochemical test scheme for identifying clinical isolates of Enterococcus faecalis and Enterococcus faecium
AUTHOR(S): Day, A. M.; Sandoe, J. A. T.; Cove, J. H.; Phillips-Jones, M. K.
CORPORATE SOURCE: Division of Microbiology, University of Leeds, Leeds, LS2 9JT, UK
SOURCE: Letters in Applied Microbiology (2001), 33(5), 392-396
CODEN: LAMIE7; ISSN: 0266-8254
PUBLISHER: Blackwell Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB To evaluate the full test scheme of Facklam and Sahm (1995) for the identification of clin. enterococcal isolates to genus and species level. Fifty-nine clin. isolates, previously provisionally classed as enterococci on the basis of just four biochem. tests of Facklam and Sahm and one other test, were subjected to genus and species identification using the full identification scheme of Facklam and Sahm; 98% of these strains were confirmed to be enterococci and of these, 69% were identified as Enterococcus faecalis and 31% as Enterococcus faecium. Six tests in the scheme (out of 24) gave anomalous or unreliable results for some strains, and two gave unexpected results for the majority of strains presumptively identified as Ent. faecium. Nine (out of 12) genus tests and nine (out of 12) species tests from the Facklam and Sahm scheme were reliable. Testing for the presence of the Lancefield antigen D was also useful. The majority of presumptive Ent. faecium strains gave different results for the sorbitol and raffinose tests from that expected. This study indicates the level of reliability for each of the tests in a current enterococcal identification scheme for differentiating clin. isolates, and showed that two tests gave consistently different test results from those expected for Ent. faecium.
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:223968 CAPLUS
DOCUMENT NUMBER: 134:363780
TITLE: Diversity within reference strains of Corynebacterium matruchotii includes Corynebacterium durum and a novel organism
AUTHOR(S): Barrett, Sara L. Rassoulian; Cookson, Brad T.; Carlson, Ladonna C.; Bernard, Kathryn A.; Coyle, Marie B.
CORPORATE SOURCE: Department of Laboratory Medicine, University of Washington Medical Center, Seattle, WA, 98195, USA
SOURCE: Journal of Clinical Microbiology (2001), 39(3), 943-948
CODEN: JCMIDW; ISSN: 0095-1137

PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Corynebacterium matruchotii has been the subject of numerous dental pathogenesis studies. The purpose of the present study was to resolve concerns about diversity within the ref. strains of C. matruchotii through anal. of seven strains procured from the American Type Culture Collection (ATCC). Anal. of whole-cell fatty acid profiles with the library generation software of Microbial ID Inc. revealed that three types of organisms have been deposited in the ATCC as C. matruchotii. These three groups of organisms were also distinguishable by DNA-DNA dot blot hybridization, by sequences of two hypervariable regions of the 16S rRNA gene, and by the **pyrrolidonyl arylamidase** test. These studies indicate that two C. matruchotii ref. strains, ATCC 33449 and ATCC 33822, are members of the recently proposed species, Corynebacterium durum. The colonial morphol. and biochem. reactions of the C. durum strains are more diverse than originally reported. Strain ATCC 43833 is unique and represents a novel species. In addn. to the type strain, ATCC 14266, true members of the species C. matruchotii include ATCC strains 14265, 33806, and 43832 plus two ref. strains, L2 and Richardson 13, which comprise the vast majority of strains used in dental pathogenesis research with this species.
REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:545280 CAPLUS
DOCUMENT NUMBER: 134:112548
TITLE: Cost-effective algorithm for detection and identification of vancomycin-resistant enterococci in surveillance cultures
AUTHOR(S): Kanchana, M. V.; Deneer, H.; Blondeau, J.
CORPORATE SOURCE: Royal University Hospital, Saskatoon, SK, S7N 0W8, Can.
SOURCE: European Journal of Clinical Microbiology & Infectious Diseases (2000), 19(5), 366-369
CODEN: EJCDEU; ISSN: 0934-9723
PUBLISHER: Springer-Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A study was undertaken to develop an easy-to-use and cost-effective algorithm for the detection and identification of vancomycin-resistant enterococci (VRE) in surveillance cultures, because the incidence of VRE outbreaks in institutions across Canada has made continuous surveillance a necessity. Enterococcus faecium and Enterococcus faecalis carry transferable resistance genes and hence are a problem for infection control. In lab. surveillance, however, Enterococcus gallinarum and Enterococcus casseliflavus, which exhibit low-level nontransferable resistance, are also encountered and often create confusion in identification. Included in this study were a total of 218 strains of enterococci and other streptococci isolated from surveillance cultures. Conventional methods were used to det. their biochem. activities, and speciation was attempted in 121 strains using a rapid multiplex polymerase chain reaction (PCR) method that utilized primers for the vanA, B, C1, C2/C3 and ddl genes. The results indicated that by using only a few tests (Gram stain, **pyrrolidonyl arylamidase** activity, motility, xylose and methyl-.alpha.-D-glucopyranoside utilization), Enterococcus faecium/faecalis strains could be accurately differentiated from Enterococcus gallinarum/casseliflavus strains. For the 121 strains on which PCR was performed, there was a 100% correlation with the biochem. identification, with the added advantage that the presence of van genes could be detd. at the same time. The cost of identification using minimal biochem. testing and PCR was less than that of identification using automated systems or a battery of conventional biochem. methods. The

algorithm presented here may be used in the microbiol. lab.
REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:818318 CAPLUS
DOCUMENT NUMBER: 132:61227
TITLE: Comparative evaluation of five chromogenic media for detection, enumeration, and identification of urinary tract pathogens
AUTHOR(S): Carricajo, A.; Boiste, S.; Thore, J.; Aubert, G.; Gille, Y.; Freydiere, A. M.
CORPORATE SOURCE: Hopital Bellevue, Saint-Etienne, F-42023, Fr.
SOURCE: European Journal of Clinical Microbiology & Infectious Diseases (1999), 18(11), 796-803
CODEN: EJCDEU; ISSN: 0934-9723
PUBLISHER: Springer-Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Five chromogenic agar plates, CPS ID2 medium (bioMerieux, France), CHROMagar Orientation medium (Becton Dickinson, France), UriSelect3 medium (Sanofi Diagnostics Pasteur, France), Rainbow Agar UTI medium (Biolog, USA) and Chromogenic UTI medium (Oxoid, Germany), for the detection, enumeration and direct identification of urinary tract pathogens were compared using 443 urine specimens at two hospital labs. The enumeration of microorganisms was consistent on the 5 media for 403 of the 477 (84.5%) microorganisms. Chromogenic UTI, CPS ID2, UriSelect3, CHROMagar Orientation and Rainbow UTI gave detection rates of 98.3%, 97.9%, 97.3%, 96.9% and 94.1%, resp., with some problems in yeast growth occurring on Rainbow UTI agar and problems in Staphylococcus spp. growth occurring on UriSelect3. For the direct identification of Escherichia coli, sensitivities were 93.8%, 88.5%, 86.1% and 82.2% for CHROMagar Orientation, CPS ID2, UriSelect3 and Rainbow UTI, resp. Chromogenic UTI medium did not allow the accurate identification of Escherichia coli, since the indole reaction cannot be applied to this medium. Depending on the media, Enterococcus spp. could be identified at the genus or the species level. Slight differences were detected in the presumptive identification of the Proteus-Morganella-Providencia group and the Klebsiella-Enterobacter-Serratia group. Addnl., on Rainbow UTI agar, 12 of 20 Klebsiella pneumoniae strains and two of nine Pseudomonas aeruginosa strains were correctly identified. In conclusion, CPS ID2 medium and CHROMagar Orientation medium showed similar performance overall, while the UriSelect3, Rainbow UTI and Chromogenic UTI media require some improvement.
REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:717194 CAPLUS
DOCUMENT NUMBER: 132:90621
TITLE: Biochemical and molecular typing of Streptococcus iniae isolated from fish and human cases
AUTHOR(S): Dodson, S. V.; Maurer, J. J.; Shotts, E. B.
CORPORATE SOURCE: Department of Medical Microbiology and Parasitology, College of Veterinary Medicine, University of Georgia, Athens, GA, USA
SOURCE: Journal of Fish Diseases (1999), 22(5), 331-336
CODEN: JFIDDI; ISSN: 0140-7775
PUBLISHER: Blackwell Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Streptococcus iniae is an important bacterial pathogen of fish, causing up to 50% mortality in stocks, which has recently been assocd. with human infections. To det. whether S. iniae isolates from humans and fish are

Escherichia coli in seawaters
AUTHOR(S): Caruso, G.; Crisafi, E.; Mancuso, M.
CORPORATE SOURCE: Istituto Sperimentale Talassografico, CNR, Messina, Italy
SOURCE: Journal of Applied Microbiology (2002), 93(4), 548-556
CODEN: JAMIFK; ISSN: 1364-5072
PUBLISHER: Blackwell Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB An anal. protocol has been developed and applied for the detection of glucuronidase activity in marine waters as a rapid alternative approach to assess the microbiol. quality of seawaters. The fluorogenic substrate 4-methylumbelliferyl-.beta.-D-glucuronide is cleaved to a fluorescent product, methylumbelliferone, by the enzyme .beta.-glucuronidase, specific to Escherichia coli and closely related enterobacterial species (Shigella). The results suggest that this test is related to E. coli nos., as estd. by immunofluorescence, more significantly than to fecal coliform nos., obtained from **culture media**. The detn. of the potential rate of glucuronidase activity may be used as a diagnostic tool for the indirect estn. of the presence of E. coli in seawaters. The method may be particularly useful in the early warning of seawater pollution, allowing the screening of coastal areas with different contamination levels in reduced time.
REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1983:449927 CAPLUS
DOCUMENT NUMBER: 99:49927
TITLE: Determination of hydrogen sulfide production in a dry differentiating medium analogous to Kligler's agar
AUTHOR(S): Gorchenina, L. V.; Khomenko, N. A.; Golubeva, I. V.
CORPORATE SOURCE: Mosk. Nauchno-Issled. Inst. Vaktsin Syvorotok, Moscow, USSR
SOURCE: Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii (1983), (4), 27-30
CODEN: ZMEIAV; ISSN: 0372-9311
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB Addn. of Na2S2O5 to Kligler type medium increases the intensity of H2S prodn. by bacteria. The H2S detection involves 2 steps: initially under anaerobic conditions and in acid medium the Na2S2O3 under reductase is reduced to SO32- with evolution of H2S; the 2nd step includes the interaction of H2S with Fe salts forming black ppts. of Fe sulfides. The optimum amt. of Na2S2O5 for max. amt. of formation of H2S from enterobacteria is 0.5-1.0 %/L medium. The addn. of Na2S2O5 improved the detection esp. of Salmonella strains with weak H2S-formation ability where other commonly used media (without Na2S2O5) failed.

L11 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1978:166675 CAPLUS
DOCUMENT NUMBER: 88:166675
TITLE: Simple test sheet for **bacterial detection**
INVENTOR(S): Ashida, Katsuji; Takada, Katsutoshi
PATENT ASSIGNEE(S): Yuasa Battery Co., Ltd., Japan; Kowa Kizai Co., Ltd.
SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

similar, the present authors examd. the biochem. profiles and genetic relatedness of these isolates by random amplified polymorphic DNA (RAPD) anal. and repetitive primer polymerase chain reaction (REP PCR). The biochem. profiles differentiated between the human and fish isolates of S. iniae using **pyrrolidonyl arylamidase**, arginine dehydrogenase, ribose, .beta.-glucuronidase and glycogen as markers. These biochem. results suggest that the fish and human S. iniae isolates are genetically different. However, RAPD and REP PCR do not have the discriminatory power to differentiate between these streptococcus isolates using five different RAPD primers and BoxA primer.

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1998:105990 CAPLUS
DOCUMENT NUMBER: 128:151440
TITLE: Method and medium for detecting vancomycin-resistant Enterococcus
INVENTOR(S): Chen, Chun-Ming; Edberg, Stephen C.
PATENT ASSIGNEE(S): Idexx Laboratories, Inc., USA
SOURCE: PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9804674	A1	19980205	WO 1997-US12806	19970724
W: AU, BR, CA, JP, MX				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9736720	A1	19980220	AU 1997-36720	19970724
EP 954560	A1	19991110	EP 1997-933566	19970724
EP 954560	B1	20021023		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
AT 226630	E	20021115	AT 1997-933566	19970724
US 6355449	B1	20020312	US 2000-597951	20000620
US 2002132285	A1	20020919	US 2002-58466	20020128

PRIORITY APPLN. INFO.: US 1996-690196 A 19960726
WO 1997-US12806 W 19970724
US 2000-597951 A1 20000620

AB A microbe-specific medium for detection of vancomycin-resistant Enterococci in a test sample within 24 h and preferably within 18 h. The testing medium provides a selective growth medium for vancomycin-resistant Enterococci and includes specific nutrient indicators which only the target microbe can significantly metabolize and use for growth. The nutrient indicators contain a nutrient moiety and a detectable moiety linked together by a covalent bond. The nutrient indicators produce detectable signals only if the nutrient indicators are hydrolyzed by the Enterococci specific enzymes including .beta.-glucosidase and **pyrrolidonyl arylamidase**.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

WEST Search History

DATE: Wednesday, August 13, 2003

Set Name side by side	Query	Hit Count	Set Name result set
DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=ADJ			
L4	L3 and detection	80	L4
L3	L2 and bacterial	107	L3
L2	Vitek	398	L2
L1	Vitek and bacterial adj detection	1	L1

END OF SEARCH HISTORY

NCBI PubMed National Library of Medicine NLM

PubMed Nucleotide Protein Genome Structure PMC Taxonomy OMIM Books

Search PubMed for bacterial culture and nutrient indicator Preview Go

Clear

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- To combine searches use # before search number, e.g., #2 AND #6.
- Search numbers may not be continuous; all searches are represented.

Entrez PubMed

PubMed Services

Related Resources

Search	Most Recent Queries	Time	Result
#23	Search **bacterial culture and nutrient indicator** Limits: **Publication Date to 2000/06/20**	09:15:57	8
#16	Search **Edberg S and bacterial culture** Limits: **Publication Date to 2000/06/20**	09:11:51	13
#11	Search **Chen C and bacterial culture** Limits: **Publication Date to 2000/06/20**	09:11:25	24
#13	Search **Chen CM and bacterial culture** Limits: **Publication Date to 2000/06/20**	09:10:39	2
#10	Search **Chen A and bacterial culture** Limits: **Publication Date to 2000/06/20**	09:09:35	2
#9	Search **Chen A and bacterial** Limits: **Publication Date to 2000/06/20**	09:09:19	22
#8	Search **Chen A and enterococcus** Limits: **Publication Date to 2000/06/20**	09:08:55	0
#7	Search **Chen Cand enterococcus** Limits: **Publication Date to 2000/06/20**	09:08:38	0
#6	Search **Chen C-M and enterococcus** Limits: **Publication Date to 2000/06/20**	09:08:33	0
#5	Search **Stephen E and enterococcus** Limits: **Publication Date to 2000/06/20**	09:08:16	0
#4	Search **Stephen E vancomycin** Limits: **Publication Date to 2000/06/20**	09:07:58	0
#3	Search **Stephen E** Field: **All Fields,** Limits: **Publication Date to 2000/06/20**	09:07:39	52
#2	Search **Stephen E**	09:07:22	52
#1	Search **Stephen E and Chen C-M**	09:07:15	0

Clear History

PubMed

National Library of Medicine NLM

PubMed Nucleotide Protein Genome Structure PMC Taxonomy OMIM Books

Search PubMed for Preview Go

Clear

Limits Preview/Index **History** Clipboard Details

- Search History will be lost after eight hours of inactivity.
- To combine searches use # before search number, e.g., #2 AND #6.
- Search numbers may not be continuous; all searches are represented.

Entrez PubMed

Search	Most Recent Queries	Time	Result
#2	Search **VITek and bacterial** Field: **All Fields,** Limits: **Publication Date to 1996/07/29**	09:06:14	57
#1	Search **VITek and bacterial**	08:51:41	155

PubMed Services

Clear History

Related Resources

Write to the Help Desk
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Department of Health & Human Services
Freedom of Information Act | Disclaimer

WEST Search History

DATE: Wednesday, August 13, 2003

Set Name side by side	Query	Hit Count	Set Name result set
DB=USPT,PGPB,JPAB,EPAB,DWPI; THES=ASSIGNEE; PLUR=YES; OP=ADJ			
L7	fGTC	0	L7
L6	GTC adj agar	0	L6
L5	L4	0	L5
DB=DWPI; THES=ASSIGNEE; PLUR=YES; OP=ADJ			
L4	L3	0	L4
DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=ADJ			
L3	Donnelly L.in.	1	L3
L2	Hartman P.in.	0	L2
L1	GTC adj agar	0	L1

END OF SEARCH HISTORY

```
=> bacterial (l) culture
L1       41399 BACTERIAL (L) CULTURE

=> detectable (w) signal
L2         744 DETECTABLE (W) SIGNAL

=> L1 and L2
L3           0 L1 AND L2

=> detection andL1
L4           0 DETECTION ANDL1

=> detection and L1
L5        3298 DETECTION AND L1

=> bacterial (w) enzyme
L6        4866 BACTERIAL (W) ENZYME

=> L5 and L6
L7          27 L5 AND L6

=> nutrient (w) indicator and L1
L8           0 NUTRIENT (W) INDICATOR AND L1

=> D L27 IBIB TI SO AU ABS 1-27
L27 NOT FOUND
The L-number entered has not been defined in this session, or it
has been deleted.  To see the L-numbers currently defined in this
session, enter DISPLAY HISTORY at an arrow prompt (=>).

=> L7
L9          27 L7

=> D L7 IBIB TI SO AU ABS 1-27

L7   ANSWER 1 OF 27  CAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         2001:526215  CAPLUS
DOCUMENT NUMBER:          135:117905
TITLE:                    Primers for amplification of bacterial genes for
                          extracellular alkaline or neutral metalloproteinases
                          and serine proteinases
INVENTOR(S):              Bach, Hans-Juergen
PATENT ASSIGNEE(S):       GSF-Forschungszentrum fuer Umwelt und Gesundheit
                          G.m.b.H., Germany
SOURCE:                   PCT Int. Appl., 36 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 German
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE           APPLICATION NO.  DATE
     ---------------   ----  --------       ---------------  --------
     WO 2001051655      A2   20010719       WO 2001-EP361    20010112
     WO 2001051655      A3   20020502
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
```

DE 10001140 A1 20010726 DE 2000-10001140 20000113
DE 10001140 C2 20030612
EP 1246943 A2 20021009 EP 2001-902315 20010112
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
PRIORITY APPLN. INFO.: DE 2000-10001140 A 20000113
WO 2001-EP361 W 20010112

TI Primers for amplification of bacterial genes for extracellular alkaline or neutral metalloproteinases and serine proteinases

SO PCT Int. Appl., 36 pp.
CODEN: PIXXD2

IN Bach, Hans-Juergen

AB Primers for the **detection** of microbial genes for alk. and neutral metalloproteinases and serine proteinases that may be of industrial use, e.g. in detergents, are described. Probes were designed by comparison of sequences of known proteinases to identify sequences that were specific to **bacterial enzymes** and distinguishing them from fungal proteinases. The primers were validated by comparing their amplification products with the patterns of proteinase activity found in **culture** supernatants.

L7 ANSWER 2 OF 27 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:688219 CAPLUS
DOCUMENT NUMBER: 132:276220
TITLE: Comparison of differential plating media and two chromatography techniques for the **detection** of histamine production in bacteria
AUTHOR(S): Actis, L. A.; Smoot, J. C.; Barancin, C. E.; Findlay, R. H.
CORPORATE SOURCE: Department of Microbiology, Miami University, Oxford, OH, USA
SOURCE: Journal of Microbiological Methods (1999), 39(1), 79-90
CODEN: JMIMDQ; ISSN: 0167-7012
PUBLISHER: Elsevier Science Ireland Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

TI Comparison of differential plating media and two chromatography techniques for the **detection** of histamine production in bacteria

SO Journal of Microbiological Methods (1999), 39(1), 79-90
CODEN: JMIMDQ; ISSN: 0167-7012

AU Actis, L. A.; Smoot, J. C.; Barancin, C. E.; Findlay, R. H.

AB The **bacterial enzyme** histidine decarboxylase (Hdc) catalyzes the conversion of histidine into histamine. This amine is essential for the biosynthesis of iron chelators (siderophores) and is an important cause of food poisoning after consumption of fish contaminated with histamine-producing bacteria. In this work we compared different methods for detecting histamine secreted by different **bacterial** strains. The presence of histamine in the **culture** supernatant of Vibrio anguillarum, which produces Hdc and secretes the histamine-contg. siderophore anguibactin, was detected by thin-layer chromatog. Similar results were obtained using the **culture** supernatant of the Acinetobacter baumannii 19606 prototype strain that secretes the histamine-contg. siderophore acinetobactin. Conversely, histamine was not detected in the **culture** supernatant of an isogenic V. anguillarum Hdc mutant and the A. baumannii 8399 strain that secretes a catechol siderophore different from anguibactin and acinetobactin. These results were confirmed by capillary gas chromatog./mass spectrometry. However, all these strains tested pos. for histamine secretion when cultured on differential plating media contg. histidine and a pH indicator, which were specifically designed for the **detection** of histamine-producing bacteria. The pH increase of the medium surrounding the **bacterial** colonies was however drastically reduced when the histidine-contg. medium was supplemented with

peptone, beef ext., and glucose. The histidine-contg. **culture** supernatants of the A. baumannii and V. anguillarum strains showed an increase of about two units of pH, turned purple upon the addn. of cresol red, and contained high amts. of ammonia. Escherichia coli strains, which are Hdc neg. and do not use histidine as a carbon, nitrogen, and energy source, gave neg. results with the differential solid medium and produced only moderate amts. of ammonia when cultured in the presence of excess histidine. This study demonstrates that, although more laborious and requiring some expensive equipment, thin-layer and gas chromatog./mass spectrometry are more accurate than differential media for detecting **bacterial** histamine secretion. The results obtained with these anal. methods are not affected by byproducts such as ammonia, which are generated during the degrdn. of histidine and produce false pos. results with the differential plating media.

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 27 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:811152 CAPLUS
DOCUMENT NUMBER: 130:234152
TITLE: A new gel tube method for the direct **detection**, identification and susceptibility testing of bacteria in clinical samples
AUTHOR(S): Langlet, S.; Beaupere, F.; Contant, G.; Scheftel, J. M.
CORPORATE SOURCE: Service de Microbiologie, Centre Hospitalier de Versailles, Le Chesnay, 78157, Fr.
SOURCE: FEMS Microbiology Letters (1999), 170(1), 229-235
CODEN: FMLED7; ISSN: 0378-1097
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

TI A new gel tube method for the direct **detection**, identification and susceptibility testing of bacteria in clinical samples
SO FEMS Microbiology Letters (1999), 170(1), 229-235
CODEN: FMLED7; ISSN: 0378-1097
AU Langlet, S.; Beaupere, F.; Contant, G.; Scheftel, J. M.
AB We recently developed a simple new method which is designed to sep. and conc. bacteria from a sample by centrifugation in a gel system. **Bacterial enzyme** activity is then detected inside the gel without further manipulation using a colorimetric or fluorogenic substrate. The method provides a rapid, direct means of detecting bacteria in clin. samples, dispensing with the 24-h period normally required to isolate colonies on agar. Various applications of the method are described below, e.g. screening of neg. urine samples, identification of Escherichia coli in urine samples, identification of Staphylococcus aureus in blood **culture** broths and **detection** of oxacillin-resistant S. aureus in blood **culture** broths. The advantages of the gel system and other applications are discussed.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 27 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:481120 CAPLUS
DOCUMENT NUMBER: 129:257242
TITLE: Enzyme immunoassay detecting teichoic and lipoteichoic acids versus cerebrospinal fluid culture and latex agglutination for diagnosis of Streptococcus pneumoniae meningitis
AUTHOR(S): Stuertz, Kristin; Merx, Imke; Eiffert, Helmut; Schmutzhard, Erich; Mader, Michael; Nau, Roland
CORPORATE SOURCE: Department of Neurology, University of Gottingen, Gottingen, D-37075, Germany
SOURCE: Journal of Clinical Microbiology (1998), 36(8),

2346-2348
CODEN: JCMIDW; ISSN: 0095-1137
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English
TI Enzyme immunoassay detecting teichoic and lipoteichoic acids versus cerebrospinal fluid culture and latex agglutination for diagnosis of Streptococcus pneumoniae meningitis
SO Journal of Clinical Microbiology (1998), 36(8), 2346-2348
CODEN: JCMIDW; ISSN: 0095-1137
AU Stuertz, Kristin; Merx, Imke; Eiffert, Helmut; Schmutzhard, Erich; Mader, Michael; Nau, Roland
AB A newly developed enzyme immunoassay (EIA) was used to detect the presence of pneumococcal teichoic and lipoteichoic acids in cerebrospinal fluid (CSF) from patients with Streptococcus pneumoniae meningitis who were being treated with antibiotics. All initial CSF samples, which on culture grew S. pneumoniae, were pos. in the EIA. A total of 14 subsequent culture-neg. samples gave clear signals in the EIA up to day 15 after the onset of antibiotic treatment. For 11 CSF specimens, culture, microscopy, and latex agglutination were neg. while the EIA detected pneumococcal antigens. The EIA did not react either with CSF of patients with meningitis caused by bacteria other than S. pneumoniae or by viral pathogens. In conclusion, this EIA can be a valuable tool for the diagnosis of S. pneumoniae meningitis from CSF samples in cases in which prior antimicrobial therapy minimizes the usefulness of culture or other antigen **detection** tests.
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 5 OF 27 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:465451 CAPLUS
DOCUMENT NUMBER: 129:243395
TITLE: Specific binding of Burkholderia pseudomallei cells and their cell-surface acid phosphatase to gangliotetraosylceramide (asialo GM1) and gangliotriaosylceramide (asialo GM2)
AUTHOR(S): Kanai, Koomi; Suzuki, Yasuo; Kondo, Eiko; Maejima, Yasuhiro; Miyamoto, Daisei; Suzuki, Takashi; Kurata, Takeshi
CORPORATE SOURCE: Department of Medical Sciences, National Institute of Health, Ministry of Public Health, Nonthaburi, 11000, Thailand
SOURCE: Southeast Asian Journal of Tropical Medicine and Public Health (1997), 28(4), 781-790
CODEN: SJTMAK; ISSN: 0125-1562
PUBLISHER: SEAMEO-TROPMED Network
DOCUMENT TYPE: Journal
LANGUAGE: English
TI Specific binding of Burkholderia pseudomallei cells and their cell-surface acid phosphatase to gangliotetraosylceramide (asialo GM1) and gangliotriaosylceramide (asialo GM2)
SO Southeast Asian Journal of Tropical Medicine and Public Health (1997), 28(4), 781-790
CODEN: SJTMAK; ISSN: 0125-1562
AU Kanai, Koomi; Suzuki, Yasuo; Kondo, Eiko; Maejima, Yasuhiro; Miyamoto, Daisei; Suzuki, Takashi; Kurata, Takeshi
AB Specific binding between **bacterial** cells and host tissue is an early step of the pathogenesis of infection. Burkholderia pseudomallei cells, the causative micro-organisms of melioidosis, were demonstrated to bind specifically to tissue glycolipids (asialo GM1 and asialo GM2) by a solid-phase binding assay on thin layer chromatograms. The **detection** limit was .apprx.400 pmol of the glycolipids. Acid phosphatase purified from the **culture** filtrate of B. pseudomalle was tested for such binding properties, and the same results were

obtained. According to previous studies, the enzyme is a glycoprotein located on the cell surface, and hydrolyzed tyrosine phosphate most actively among the substrates so far tested. The mode of binding between the enzyme and the glycolipids was analyzed by comparison of binding levels among three samples different in protein content, sugar content, and specific phosphatase activities per protein and sugar residue. The results suggest the possibility of a receptor-ligand relation between the **bacterial enzyme** and the host-cell glycolipids (asialo GM).

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 6 OF 27 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1998:234140 CAPLUS
DOCUMENT NUMBER: 129:1500
TITLE: Use of 13C nuclear magnetic resonance to assess fossil fuel biodegradation: fate of [1-13C]acenaphthene in creosote polycyclic aromatic compound mixtures degraded by bacteria
AUTHOR(S): Selifonov, Sergey A.; Champman, Peter J.; Akkerman, Simon B.; Gurst, Jerome E.; Bortiatynski, Jacqueline M.; Nanny, Mark A.; Hatcher, Patrick G.
CORPORATE SOURCE: Department of Biochemistry and Institute for Advanced Studies in Biological Process Technology, University of Minnesota, St. Paul, MN, 55108, USA
SOURCE: Applied and Environmental Microbiology (1998), 64(4), 1447-1453
CODEN: AEMIDF; ISSN: 0099-2240
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English

TI Use of 13C nuclear magnetic resonance to assess fossil fuel biodegradation: fate of [1-13C]acenaphthene in creosote polycyclic aromatic compound mixtures degraded by bacteria

SO Applied and Environmental Microbiology (1998), 64(4), 1447-1453
CODEN: AEMIDF; ISSN: 0099-2240

AU Selifonov, Sergey A.; Champman, Peter J.; Akkerman, Simon B.; Gurst, Jerome E.; Bortiatynski, Jacqueline M.; Nanny, Mark A.; Hatcher, Patrick G.

AB [1-13C]acenaphthene, a tracer compd. with a NMR-active nucleus at the C-1 position, has been employed in conjunction with a std. broad-band-decoupled 13C-NMR spectroscopy technique to study the biodegrdn. of acenaphthene by various **bacterial cultures** degrading arom. hydrocarbons of creosote. Site-specific labeling at the benzylic position of acenaphthene allows 13C-NMR **detection** of chem. changes due to initial oxidns. catalyzed by **bacterial enzymes** of arom. hydrocarbon catabolism. Biodegrdn. of [1-13C]acenaphthene in the presence of naphthalene or creosote polycyclic arom. compds. (PACs) was examd. with an undefined mixed **bacterial culture** (established by enrichment on creosote PACs) and with isolates of individual naphthalene- and phenanthrene-degrading strains from this **culture**. From 13C-NMR spectra of extractable materials obtained in time course biodegrdn. expts. under optimized conditions, a no. of signals were assigned to accumulated products such as 1-acenaphthenol, 1-acenaphthenone, acenaphthene-1,2-diol and naphthalene 1,8-dicarboxylic acid, formed by benzylic oxidn. of acenaphthene and subsequent reactions. Limited degrdn. of acenaphthene could be attributed to its oxidn. by naphthalene 1,2-dioxygenase or related dioxygenases, indicative of certain limitations of the undefined mixed **culture** with respect to acenaphthene catabolism. Coinoculation of the mixed **culture** with cells of acenaphthene-grown strain Pseudomonas sp. strain A2279 mitigated the accumulation of partial information products and resulted in more complete degrdn. of acenaphthene. This study demonstrates the value of the stable isotope labeling approach and its

ability to reveal incomplete mineralization even when as little as 2 to 3% of the substrate is incompletely oxidized, yielding products of partial transformation. The approach outlined may prove useful in assessing bioremediation performance.

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 7 OF 27 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:644935 CAPLUS
DOCUMENT NUMBER: 127:315259
TITLE: In situ histochemical **detection** of .beta.-galactosidase activity in lung: assessment of X-Gal reagent in distinguishing lacZ gene expression and endogenous .beta.-galactosidase activity
AUTHOR(S): Weiss, Daniel J.; Liggitt, Denny; Clark, Joan G.
CORPORATE SOURCE: Division of Pulmonary and Critical Care Medicine, Fred Hutchinson Cancer Research Center and Department of Comparative Medicine, University of Washington School of Medicine, Seattle, WA, 98104, USA
SOURCE: Human Gene Therapy (1997), 8(13), 1545-1554
CODEN: HGTHE3; ISSN: 1043-0342
PUBLISHER: Liebert
DOCUMENT TYPE: Journal
LANGUAGE: English
TI In situ histochemical **detection** of .beta.-galactosidase activity in lung: assessment of X-Gal reagent in distinguishing lacZ gene expression and endogenous .beta.-galactosidase activity
SO Human Gene Therapy (1997), 8(13), 1545-1554
CODEN: HGTHE3; ISSN: 1043-0342
AU Weiss, Daniel J.; Liggitt, Denny; Clark, Joan G.
AB **Bacterial** lacZ is one of the most commonly used reporter genes for assessing gene transfer to lung. However, lung contains endogenous .beta.-galactosidase (.beta.-Gal), which can confound estn. of exogenous lacZ expression by histochem. techniques (i.e., X-Gal) for in situ demonstration of enzyme activity. We investigated several parameters of the X-Gal reaction, including time and temp. of X-Gal exposure as well as lung tissue processing and fixation techniques, and found that none of these could be used to distinguish between endogenous and exogenous .beta.-Gal activities. The mammalian and **bacterial** .beta.-Gal enzymes, however, have pH optima in the acidic and neutral ranges, resp. Exposing whole lung, lung minces, or mounted frozen sections of lung to X-Gal at mildly alk. pH (pH 8.0-8.5), minimized **detection** of endogenous activity in lungs from a variety of species while preserving that resulting from **bacterial enzyme** activity in a transgenic mouse expressing lacZ. This technique was also useful in distinguishing endogenous activity from that resulting from adenovirus-mediated lacZ gene transfer to diploid lung fibroblasts in primary **culture**. An appropriate buffer that maintains the desired pH throughout the duration of X-Gal exposure must be used.

L7 ANSWER 8 OF 27 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:300060 CAPLUS
DOCUMENT NUMBER: 124:337395
TITLE: Autolysins of lactic acid bacteria
AUTHOR(S): Chapot-Chartier, M. P.
CORPORATE SOURCE: Unite de recherches de biochimie et structure des proteines, Inra, Jouy-en-Josas, 78352, Fr.
SOURCE: Lait (1996), 76(1-2), 91-109
CODEN: LAITAG; ISSN: 0023-7302
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal; General Review
LANGUAGE: French
TI Autolysins of lactic acid bacteria
SO Lait (1996), 76(1-2), 91-109

CODEN: LAITAG; ISSN: 0023-7302
AU Chapot-Chartier, M. P.
AB A review with 57 refs. Autolysins are defined as endogenous **bacterial enzymes** able to hydrolyze peptidoglycan which is the main and shape-maintaining component of the cell wall; their action can induce bacteriolysis. A no. of autolysins have been characterized at the mol. level in different bacteria. The physiol. role of these potentially lethal enzymes is not fully understood. Their play a role in cell sepn. at the end of cell division, in cell wall turn-over, in flagella formation and in sporulation. In the particular case of lactic acid bacteria which are widely used in dairy industry, cell autolysis allowing the release of intracellular enzymic content is expected to result in more rapid development of organoleptic properties, aroma intensification as well as bitterness decrease. Knowledge of the autolytic system from lactic acid bacteria is still incomplete and concerns mainly lactococci and lactobacilli. Autolytic properties of different strains were studied in **culture** medium contg. different sugar concns. and in buffered solns. Renaturing electrophoresis which consists in SDS-PAGE of a polyacrylamide gel contg. an autolysin substrate such as inactivated bacteria or cell wall prepn. allows **detection** of different peptidoglycan hydrolase activities in lactococci and lactobacilli. The major autolysin activity present in Lactococcus lactis cremoris as well as in Lactobacillus helveticus or Lactobacillus acidophilus was identified as a muramidase. Recently, the gene encoding this muramidase was cloned and sequenced and it was shown to be involved in cell sepn. at the end of cell division. The impact of starter lactic acid bacteria lysis on cheese ripening was evidenced in the case of a few strains of lactococci in pressed-type cheese. Early lysis of bacteria was correlated with higher level of proteolysis and lower level of bitterness. Further studies concerning the autolytic system of lactic acid bacteria, mol. characterization of the enzymes and regulation of the expression of their activity should provide the tools necessary to obtain strains which lyse early during ripening.

L7 ANSWER 9 OF 27 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1993:37611 CAPLUS
DOCUMENT NUMBER: 118:37611
TITLE: A role for monoclonal antibodies in the analysis of food proteins
AUTHOR(S): Paraf, A.
CORPORATE SOURCE: Lab. Pathol. Infect. Immunol., Inst. Natl. Rech. Agron., Nouzilly, 37380, Fr.
SOURCE: Trends in Food Science & Technology (1992), 3(10), 263-7
CODEN: TFTEEH; ISSN: 0924-2244
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
TI A role for monoclonal antibodies in the analysis of food proteins
SO Trends in Food Science & Technology (1992), 3(10), 263-7
CODEN: TFTEEH; ISSN: 0924-2244
AU Paraf, A.
AB A review with 45 refs. on applications of monoclonal antibodies in authenticity testing and **detection** of food adulteration, in studies of modification of protein structure during thermal processing, in **detection** of food allergens, and in characterization of fermn. starter **cultures** by identifying **bacterial enzymes**. Defining epitopes and extg. proteins from food are discussed.

L7 ANSWER 10 OF 27 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1992:527706 CAPLUS
DOCUMENT NUMBER: 117:127706
TITLE: New rapid drug susceptibility tests based on microorganism enzyme activity. I. Establishment of

reaction solution and **detection** system
AUTHOR(S): Kariyama, Hideyuki
CORPORATE SOURCE: Dep. Clin. Lab., Osaka Prefect. Rehabil. Cent. Hosp., Sakai, Japan
SOURCE: Chemotherapy (Tokyo) (1992), 40(6), 727-36
CODEN: NKRZAZ; ISSN: 0009-3165
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

TI New rapid drug susceptibility tests based on microorganism enzyme activity. I. Establishment of reaction solution and **detection** system
SO Chemotherapy (Tokyo) (1992), 40(6), 727-36
CODEN: NKRZAZ; ISSN: 0009-3165
AU Kariyama, Hideyuki
AB In order to speed up susceptibility tests, a new approach to the measurement method was investigated. The objective was to omit some of the **culture** procedures. A special reaction mixt. using a color indicator [resazurin (I)] for **bacterial enzyme** activity as the index was devised. This coloration system had a high sensitivity with no lag time, and was easily measured. Eight std. ATCC strains were tested using the system, and the following results were obtained. The intensity of I coloration increased in proportion to the inoculum size. The sensitivity of the I coloration method was tens to hundreds of times greater than that of turbidity elevation in M. H. Broth. Vitamin K3 had a significant influence on the reducing activity of the microorganisms used in the present study. A high sensitivity with no lag time was obtained for 3-5 .times. 106 colony-forming unit (CFU)/mL inoculum size as well as for the **bacterial** automated analyzer inoculum size. The same intensity was obtained by Candida albicans, Streptococcus pyogenes as well as by Escherichia coli or Staphylococcus aureus in the new color mixt. soln.

L7 ANSWER 11 OF 27 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1992:79286 CAPLUS
DOCUMENT NUMBER: 116:79286
TITLE: The aconitase of Escherichia coli: purification of the enzyme and molecular cloning and map location of the gene (acn)
AUTHOR(S): Prodromou, Chrisotomos; Haynes, Megan J.; Guest, John R.
CORPORATE SOURCE: Krebs Inst. Biomol. Res., Univ. Sheffield, Sheffield, S10 2UH, UK
SOURCE: Journal of General Microbiology (1991), 137(11), 2505-15
CODEN: JGMIAN; ISSN: 0022-1287
DOCUMENT TYPE: Journal
LANGUAGE: English

TI The aconitase of Escherichia coli: purification of the enzyme and molecular cloning and map location of the gene (acn)
SO Journal of General Microbiology (1991), 137(11), 2505-15
CODEN: JGMIAN; ISSN: 0022-1287
AU Prodromou, Chrisotomos; Haynes, Megan J.; Guest, John R.
AB The aconitase of E. coli was purified to homogeneity, albeit in low yield (0.6%). It was shown to be a monomeric protein of Mr 97,500 by gel filtration and SDS-PAGE anal., resp. The N-terminal amino acid sequence resembled that of the Bacillus subtilis enzyme (citB product), but the similarity at the DNA level was insufficient to allow **detection** of the E. coli acn gene using a 456-bp cibB probe. Phages contg. the acn gene were isolated from a .lambda.-E. coli gene bank by immunoscreening with an antiserum raised against purified **bacterial enzyme**. The acn gene was located at 28 min (1350 kb) in the phys. map of the E. coli chromosome by probing Southern blots with a fragment of the gene. Attempts to locate the gene using the same procedure with oligonucleotide probes encoding segments of the N-terminal amino acid

sequence were complicated by the lack of probe specificity and an inaccuracy in the phys. map of Y. Kohara et al. (1987). Aconitase specific activity was amplified some 20-200-fold in **cultures** transformed with pGS447, a deriv. of pCU119 contg. the acn gene, and an apparent 4-fold activation-deactivation of the phagemid-encoded enzyme was obsd. in late exponential phase. The aconitase antiserum cross-reacted with both the porcine and Salmonella typhimurium (Mr 120,000) enzymes.

L7 ANSWER 12 OF 27 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1990:437409 CAPLUS
DOCUMENT NUMBER: 113:37409
TITLE: Device for enhancing fluorescence and enzymic hydrolysis kinetics, and methods of using the device for microorganism identification
INVENTOR(S): Sussman, Mark L.; Wilson, Stephen G.; Tice, Gregory
PATENT ASSIGNEE(S): Becton, Dickinson and Co., USA
SOURCE: Eur. Pat. Appl., 32 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 347771	A2	19891227	EP 1989-110958	19890616
EP 347771	A3	19910327		
EP 347771	B1	19960814		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
AU 8933244	A1	19891221	AU 1989-33244	19890420
AU 616957	B2	19911114		
AT 141413	E	19960815	AT 1989-110958	19890616
ES 2090026	T3	19961016	ES 1989-110958	19890616
FI 8902994	A	19891221	FI 1989-2994	19890619
DK 8903046	A	19891221	DK 1989-3046	19890620
JP 02046280	A2	19900215	JP 1989-158138	19890620

PRIORITY APPLN. INFO.: US 1988-209677 19880620

TI Device for enhancing fluorescence and enzymic hydrolysis kinetics, and methods of using the device for microorganism identification
SO Eur. Pat. Appl., 32 pp.
CODEN: EPXXDW
IN Sussman, Mark L.; Wilson, Stephen G.; Tice, Gregory
AB A carrier having at least one kinetics- and fluorescence-enhancing support and a dry substance selected from fluorogenic substrates, B-methylumbelliferone, 7-amino-4-Me coumarin, B-naphthylamine, fluorescein, and resorufin deposited on the support demonstrates substantial enhancement of hydrolysis kinetics and fluorescence over pure liq. systems. When the device has a plurality of supports and the supports have different fluorogenic substrates, an enzyme rate-of-reaction profile representative of a microorganism in the suspension can be detd. and used to identify the organism. The device can also be used to characterize enzymes expressed by other biol. specimens. Methods using the above device are described. **Bacterial enzyme** rate anal. was performed with the device of the invention for 25 of the bacteria most commonly isolated from blood **culture** bottles. Forty-six different fluorogenic substrates were used in the test. The data generated were analyzed by nearest neighbor anal. using unit sphere projection. Each strain tested identified to another strain of the same species as its nearest neighbor for 95% of the tests. The device of the invention was also used to test for e.g. microorganisms expressing .beta.-lactamase activity.

L7 ANSWER 13 OF 27 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1979:554415 CAPLUS

DOCUMENT NUMBER: 91:154415
TITLE: Transgenosis in higher plant cells - a reevaluation
AUTHOR(S): Malhotra, Kusum; Rashid, A.; Maheshwari, S. C.
CORPORATE SOURCE: Dep. Bot., Univ. Delhi, Delhi, 110007, India
SOURCE: Zeitschrift fuer Pflanzenphysiologie (1979), 95(1), 21-31
CODEN: ZSPPAD; ISSN: 0044-328X
DOCUMENT TYPE: Journal
LANGUAGE: English

TI Transgenosis in higher plant cells - a reevaluation
SO Zeitschrift fuer Pflanzenphysiologie (1979), 95(1), 21-31
CODEN: ZSPPAD; ISSN: 0044-328X
AU Malhotra, Kusum; Rashid, A.; Maheshwari, S. C.
AB In expts. designed to study the possible transfer of **bacterial** lac gene into the haploid callus of Datura innoxia, using bacteriophage lambda as a gene carrier, .apprx.60% of the calli showed higher levels of .beta.-galactosidase over the controls. The av. increase was 3.5-fold. Since, unexpectedly, the control calli also showed a basal level of .beta.-galactosidase, it became essential to det. whether the induced enzyme was Escherichia coli specific. Accordingly, the .beta.-galactosidases of callus and E. coli were compared, taking into consideration the effect of pH and temp. on enzyme activity and the electrophoretic mobility of the 2 enzymes. These properties failed, however, to provide any definite evidence that the induced enzyme is E. coli specific. Tissue **cultures** also failed in producing any transformant. Finally, in in vitro hydrolysis of radioactive lactose, carried out using callus exts., possible hydrolytic products were sepd. by paper chromatog. These studies indicated that callus .beta.-galactosidase assayed by the common colorimetric procedure of o-nitrophenyl-.beta.-galactoside hydrolysis actually lacked lactose hydrolyzing ability, whereas E. coli .beta.-galactosidase did have this capability. Based on the methods used for **detection** it was concluded that no gene had been incorporated into the plant cell genome, and that the increase in enzyme activity after .lambda.plac phage inoculation did not really represent an increase in E. coli specific .beta.-galactosidase. These results cast doubt on the validity of transgenosis reported in recent yr.

L7 ANSWER 14 OF 27 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1979:3073 CAPLUS
DOCUMENT NUMBER: 90:3073
TITLE: Rapid **detection** of selected gram-negative bacteria by aminopeptidase profiles
AUTHOR(S): Peterson, Eugene H.; Hsu, Edward J.
CORPORATE SOURCE: Dep. Biol., Univ. Missouri, Kansas City, MO, USA
SOURCE: Journal of Food Science (1978), 43(6), 1853-6
CODEN: JFDSAZ; ISSN: 0022-1147
DOCUMENT TYPE: Journal
LANGUAGE: English

TI Rapid **detection** of selected gram-negative bacteria by aminopeptidase profiles
SO Journal of Food Science (1978), 43(6), 1853-6
CODEN: JFDSAZ; ISSN: 0022-1147
AU Peterson, Eugene H.; Hsu, Edward J.
AB Selected gram-neg. bacteria were differentiated by comparing profiles of their intracellular aminopeptidase activities. Aeromonas liquefaciens plus 14 species and serotypes of Enterobacteriaceae were used. Substrates for **bacterial enzymes** were 19 L-amino acid .beta.-naphthylamides. The .beta.-naphthylamines released by enzyme hydrolysis were detd. for each amino acid by fluorometric anal., and a profile for each **culture** was obtained in 4-6 h. The technique appears to be useful for differentiation of bacteria and for demonstrating relatedness.

L7 ANSWER 15 OF 27 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1973:490300 CAPLUS
DOCUMENT NUMBER: 79:90300
TITLE: Biological effects of enzymic deprivation of L-methionine in cell culture and an experimental tumor
AUTHOR(S): Kreis, Willi; Hession, Catherine
CORPORATE SOURCE: Mem. Sloan-Kettering Cancer Cent., New York, NY, USA
SOURCE: Cancer Research (1973), 33(8), 1866-9
CODEN: CNREA8; ISSN: 0008-5472
DOCUMENT TYPE: Journal
LANGUAGE: English

TI Biological effects of enzymic deprivation of L-methionine in cell culture and an experimental tumor
SO Cancer Research (1973), 33(8), 1866-9
CODEN: CNREA8; ISSN: 0008-5472
AU Kreis, Willi; Hession, Catherine
AB Because methionine donates its methyl group in reactions assocd. with regulation of cell metab. the effects of methionine deficiency were studied in tumor cells using a **bacterial enzyme** which degrades L-methionine to methanethiol, NH3, and .alpha.-ketobutyric acid (L-methionine-.alpha.-deamino-.gamma.-mercaptomethane lyase). The L-methioninase inhibited Walker carcinosarcoma 256 of rats to a greater extent than a methionine-free diet. Half-life of the enzyme in rat plasma was 4 hr, with clearance beyond **detection** levels by 24 hr after injection of 250 units/kg, at which time plasma methionine levels had returned to 89% of normal after falling to 8%. Comparable decreases in plasma methionine levels were achieved whether inoculation was i.v. or i.p. Enzyme activity following a single i.v. injection was higher in the liver than in kidney or spleen. The effect of the enzyme in **cultures** of P815 cells was a complete cessation of growth with the possibility of partial reversal upon addn. of large amts. of L-methionine. The results supported the possibility that a partial selectivity of enzymes for tumor tissue might be achieved as a consequence of the depletion of methyl groups for the relatively overmethylated DNA and RNA of certain tumors.

L7 ANSWER 16 OF 27 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1948:17647 CAPLUS
DOCUMENT NUMBER: 42:17647
ORIGINAL REFERENCE NO.: 42:3806g-h
TITLE: Demonstration of phosphatases and lipase in bacteria and true fungi by staining methods and the effect of penicillin on phosphatase activity
AUTHOR(S): Bayliss, Milward; Glick, David; Siem, Robert A.
CORPORATE SOURCE: Univ. of Minnesota, Minneapolis
SOURCE: Journal of Bacteriology (1948), 55, 307-16
CODEN: JOBAAY; ISSN: 0021-9193
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

TI Demonstration of phosphatases and lipase in bacteria and true fungi by staining methods and the effect of penicillin on phosphatase activity
SO Journal of Bacteriology (1948), 55, 307-16
CODEN: JOBAAY; ISSN: 0021-9193
AU Bayliss, Milward; Glick, David; Siem, Robert A.
AB The Gomori method for acid and alk. phosphatase and lipase (C.A. 40, 5790.4) was employed. Localized areas within the organisms gave pos. stains in certain instances, suggestive of an internal structure of unhomogeneity. Manganous and Mg ions along with alanine in the **culture** agar were able to activate the **bacterial enzymes** and markedly increase their staining intensity. Penicillin, in concns. completely sufficient to inhibit growth of certain bacteria, had no significant effect on their phosphatase activities.

L7 ANSWER 17 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 2002:203382 BIOSIS

DOCUMENT NUMBER: PREV200200203382
TITLE: **Detection** and enumeration of coliforms in drinking water: Current methods and emerging approaches.
AUTHOR(S): Rompre, Annie; Servais, Pierre (1); Baudart, Julia; de-Roubin, Marie-Renee; Laurent, Patrick
CORPORATE SOURCE: (1) Ecologie des Systemes Aquatiques, Universite Libre de Bruxelles, Boulevard du Triomphe, Campus Plaine, 1050, Brussels: pservais@ulb.ac.be Belgium
SOURCE: Journal of Microbiological Methods, (March, 2002) Vol. 49, No. 1, pp. 31-54. http:///www.elsevier.com/locate/jmicrmeth ; http:///www.elsevier.com/locate/jmicmeth. print. ISSN: 0167-7012.
DOCUMENT TYPE: General Review
LANGUAGE: English
TI **Detection** and enumeration of coliforms in drinking water: Current methods and emerging approaches.
SO Journal of Microbiological Methods, (March, 2002) Vol. 49, No. 1, pp. 31-54. http:///www.elsevier.com/locate/jmicrmeth; http:///www.elsevier.com/locate/jmicmeth. print. ISSN: 0167-7012.
AU Rompre, Annie; Servais, Pierre (1); Baudart, Julia; de-Roubin, Marie-Renee; Laurent, Patrick
AB The coliform group has been used extensively as an indicator of water quality and has historically led to the public health protection concept. The aim of this review is to examine methods currently in use or which can be proposed for the monitoring of coliforms in drinking water. Actually, the need for more rapid, sensitive and specific tests is essential in the water industry. Routine and widely accepted techniques are discussed, as are methods which have emerged from recent research developments. Approved traditional methods for coliform **detection** include the multiple-tube fermentation (MTF) technique and the membrane filter (MF) technique using different specific media and incubation conditions. These methods have limitations, however, such as duration of incubation, antagonistic organism interference, lack of specificity and poor **detection** of slow-growing or viable but non-culturable (VBNC) microorganisms. Nowadays, the simple and inexpensive membrane filter technique is the most widely used method for routine enumeration of coliforms in drinking water. The **detection** of coliforms based on specific enzymatic activity has improved the sensitivity of these methods. The enzymes beta-D galactosidase and beta-D glucuronidase are widely used for the **detection** and enumeration of total coliforms and Escherichia coli, respectively. Many chromogenic and fluorogenic substrates exist for the specific **detection** of these enzymatic activities, and various commercial tests based on these substrates are available. Numerous comparisons have shown these tests may be a suitable alternative to the classical techniques. They are, however, more expensive, and the incubation time, even though reduced, remains too long for same-day results. More sophisticated analytical tools such as solid phase cytometry can be employed to decrease the time needed for the **detection** of **bacterial** enzymatic activities, with a low **detection** threshold. **Detection** of coliforms by molecular methods is also proposed, as these methods allow for very specific and rapid **detection** without the need for a cultivation step. Three molecular-based methods are evaluated here: the immunological, polymerase chain reaction (PCR) and in-situ hybridization (ISH) techniques. In the immunological approach, various antibodies against coliform bacteria have been produced, but the application of this technique often showed low antibody specificity. PCR can be used to detect coliform bacteria by means of signal amplification: DNA sequence coding for the lacZ gene (beta-galactosidase gene) and the uidA gene (beta-D glucuronidase gene) has been used to detect total coliforms and E. coli, respectively. However, quantification with PCR is still lacking in precision and necessitates extensive laboratory work. The FISH technique involves the use of oligonucleotide probes to detect complementary sequences inside

specific cells. Oligonucleotide probes designed specifically for regions of the 16S RNA molecules of Enterobacteriaceae can be used for microbiological quality control of drinking water samples. FISH should be an interesting viable alternative to the conventional **culture** methods for the **detection** of coliforms in drinking water, as it provides quantitative data in a fairly short period of time (6 to 8 h), but still requires research effort. This review shows that even though many innovative **bacterial detection** methods have been developed, few have the potential for becoming a standardized method for the **detection** of coliforms in drinking water samples.

L7 ANSWER 18 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 2000:14238 BIOSIS
DOCUMENT NUMBER: PREV200000014238
TITLE: Comparison of differential plating media and two chromatography techniques for the **detection** of histamine production in bacteria.
AUTHOR(S): Actis, Luis A. (1); Smoot, James C.; Barancin, Courtney E.; Findlay, Robert H.
CORPORATE SOURCE: (1) Department of Microbiology, Miami University, 40 Pearson Hall, Oxford, OH, 45056 USA
SOURCE: Journal of Microbiological Methods, (Dec., 1999) Vol. 39, No. 1, pp. 79-90.
ISSN: 0167-7012.
DOCUMENT TYPE: Article
LANGUAGE: English
SUMMARY LANGUAGE: English
TI Comparison of differential plating media and two chromatography techniques for the **detection** of histamine production in bacteria.
SO Journal of Microbiological Methods, (Dec., 1999) Vol. 39, No. 1, pp. 79-90.
ISSN: 0167-7012.
AU Actis, Luis A. (1); Smoot, James C.; Barancin, Courtney E.; Findlay, Robert H.
AB The **bacterial enzyme** histidine decarboxylase (Hdc) catalyses the conversion of histidine into histamine. This amine is essential for the biosynthesis of iron chelators (siderophores) and is an important cause of food poisoning after consumption of fish contaminated with histamine-producing bacteria. In this work we compared different methods for detecting histamine secreted by different **bacterial** strains. The presence of histamine in the **culture** supernatant of Vibrio anguillarum, which produces Hdc and secretes the histamine-containing siderophore anguibactin, was detected by thin-layer chromatography. Similar results were obtained using the **culture** supernatant of the Acinetobacter baumannii 19606 prototype strain that secretes the histamine-containing siderophore acinetobactin. Conversely, histamine was not detected in the **culture** supernatant of an isogenic V. anguillarum Hdc mutant and the A. baumannii 8399 strain that secretes a catechol siderophore different from anguibacti n and acinetobactin. These results were confirmed by capillary gas chromatography/mass spectrometry. However, all these strains tested positive for histamine secretion when cultured on differential plating media containing histidine and a pH indicator, which were specifically designed for the **detection** of histamine-producing bacteria. The pH increase of the medium surrounding the **bacterial** colonies was however drastically reduced when the histidine-containing medium was supplemented with peptone, beef extract, and glucose. The histidine-containing **culture** supernatants of the A. baumannii and V. anguillarum strains showed an increase of about two units of pH, turned purple upon the addition of cresol red, and contained high amounts of ammonia. Escherichia coli strains, which are Hdc negative and do not use histidine as a carbon, nitrogen, and energy source, gave negative results with the differential solid medium and produced only moderate amounts of ammonia when cultured in the p resence of excess histidine.

This study demonstrates that, although more laborious and requiring some expensive equipment, thin-layer and gas chromatography/mass spectrometry are more accurate than differential media for detecting **bacterial** histamine secretion. The results obtained with these analytical methods are not affected by byproducts such as ammonia, which are generated during the degradation of histidine and produce false positive results with the differential plating media.

L7 ANSWER 19 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1999:241637 BIOSIS
DOCUMENT NUMBER: PREV199900241637
TITLE: A phosphotransferase that generates phosphatidylinositol 4-phosphate (PtdIns-4-P) from phosphatidylinositol and lipid A in Rhizobium leguminosarum. A membrane-bound enzyme linking lipid A and PtdIns-4-P biosynthesis.
AUTHOR(S): Basu, Shib Sankar; York, John D.; Raetz, Christian R. H. (1)
CORPORATE SOURCE: (1) Department of Biochemistry, Duke University Medical Center, Durham, NC, 27710 USA
SOURCE: Journal of Biological Chemistry, (April 16, 1999) Vol. 274, No. 16, pp. 11139-11149.
ISSN: 0021-9258.
DOCUMENT TYPE: Article
LANGUAGE: English
SUMMARY LANGUAGE: English
TI A phosphotransferase that generates phosphatidylinositol 4-phosphate (PtdIns-4-P) from phosphatidylinositol and lipid A in Rhizobium leguminosarum. A membrane-bound enzyme linking lipid A and PtdIns-4-P biosynthesis.
SO Journal of Biological Chemistry, (April 16, 1999) Vol. 274, No. 16, pp. 11139-11149.
ISSN: 0021-9258.
AU Basu, Shib Sankar; York, John D.; Raetz, Christian R. H. (1)
AB Membranes of Rhizobium leguminosarum contain a 3-deoxy-D-manno-octulosonic acid (Kdo)-activated lipid A 4'-phosphatase required for generating the unusual phosphate-deficient lipid A found in this organism. The enzyme has been solubilized with Triton X-100 and purified 80-fold. As shown by co-purification and thermal inactivation studies, the 4'-phosphatase catalyzes not only the hydrolysis of (Kdo)2-(4'-32P)lipid IVA but also the transfer the 4'-phosphate of Kdo2-(4'-32P)lipid IVA to the inositol headgroup of phosphatidylinositol (PtdIns) to generate PtdIns-4-P. Like the 4'-phosphatase, the phosphotransferase activity is not present in Escherichia coli, Rhizobium meliloti, or the nodulation-defective mutant 24AR of R. leguminosarum. The specific activity for the phosphotransferase reaction is about 2 times higher than that of the 4'-phosphatase. The phosphotransferase assay conditions are similar to those used for PtdIns kinases, except that ATP and Mg2+ are omitted. The apparent Km for PtdIns is apprx500 muM versus 20-100 muM for most PtdIns kinases, but the phosphotransferase specific activity in crude cell extracts is higher than that of most PtdIns kinases. The phosphotransferase is absolutely specific for the 4-position of PtdIns and is highly selective for PtdIns as the acceptor. The 4'-phosphatase/phosphotransferase can be eluted from heparin- or Cibacron blue-agarose with PtdIns. A phosphoenzyme intermediate may account for the dual function of this enzyme, since a single 32P-labeled protein species (Mr apprx68,000) can be trapped and visualized by SDS gel electrophoresis of enzyme preparations incubated with Kdo2-(4'-32P)lipid IVA. Although PtdIns is not detected in **cultures** of R. leguminosarum/etli (CE3), PtdIns may be synthesized during nodulation or supplied by plant membranes, given that soybean PtdIns is an excellent phosphate acceptor. A **bacterial enzyme** for generating PtdIns-4-P and a direct link between lipid A and PtdIns-4-P biosynthesis have not been reported previously.

L7 ANSWER 20 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

ACCESSION NUMBER: 1999:60526 BIOSIS
DOCUMENT NUMBER: PREV199900060526
TITLE: A new gel tube method for the direct **detection**, identification and susceptibility testing of bacteria in clinical samples.
AUTHOR(S): Langlet, S.; Beaupere, F.; Contant, G. (1); Scheftel, J. M.
CORPORATE SOURCE: (1) Dep. Microbiol., Serbio, 92635 Gennevilliers Cedex France
SOURCE: FEMS Microbiology Letters, (Jan. 1, 1999) Vol. 170, No. 1, pp. 229-235.
ISSN: 0378-1097.
DOCUMENT TYPE: Article
LANGUAGE: English
TI A new gel tube method for the direct **detection**, identification and susceptibility testing of bacteria in clinical samples.
SO FEMS Microbiology Letters, (Jan. 1, 1999) Vol. 170, No. 1, pp. 229-235.
ISSN: 0378-1097.
AU Langlet, S.; Beaupere, F.; Contant, G. (1); Scheftel, J. M.
AB We recently developed a simple new method which is designed to separate and concentrate bacteria from a sample by centrifugation in a gel system. **Bacterial enzyme** activity is then detected inside the gel without further manipulation using a colorimetric or fluorogenic substrate. The method provides a rapid, direct means of detecting bacteria in clinical samples, dispensing with the 24-h period normally required to isolate colonies on agar. Various applications of the method are described below, e.g. screening of negative urine samples, identification of Escherichia coli in urine samples, identification of Staphylococcus aureus in blood **culture** broths and **detection** of oxacillin-resistant S. aureus in blood **culture** broths. The advantages of the gel system and other applications are discussed.

L7 ANSWER 21 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1998:405932 BIOSIS
DOCUMENT NUMBER: PREV199800405932
TITLE: Specific binding of Burkholderia pseudomallei cells and their cell-surface acid phosphatase to ganglio-tetraosylceramide (asialo GM1) and gangliotriaosylceramide (asialo GM2.
AUTHOR(S): Kanai, Koomi; Suzuki, Yasuo; Kondo, Eiko (1); Maejima, Yasuhiro; Miyamoto, Daisei; Suzuki, Takashi; Kurata, Takeshi
CORPORATE SOURCE: (1) 1-5-11-906, Igusa, Suginami-ku, Tokyo 167-0021 Japan
SOURCE: Southeast Asian Journal of Tropical Medicine and Public Health, (Dec., 1997) Vol. 28, No. 4, pp. 781-790.
ISSN: 0125-1562.
DOCUMENT TYPE: Article
LANGUAGE: English
TI Specific binding of Burkholderia pseudomallei cells and their cell-surface acid phosphatase to ganglio-tetraosylceramide (asialo GM1) and gangliotriaosylceramide (asialo GM2.
SO Southeast Asian Journal of Tropical Medicine and Public Health, (Dec., 1997) Vol. 28, No. 4, pp. 781-790.
ISSN: 0125-1562.
AU Kanai, Koomi; Suzuki, Yasuo; Kondo, Eiko (1); Maejima, Yasuhiro; Miyamoto, Daisei; Suzuki, Takashi; Kurata, Takeshi
AB Specific binding between **bacterial** cells and host tissue is an early step of the pathogenesis of infection. Burkholderia pseudomallei cells, the causative micro-organisms of melioidosis, were demonstrated to bind specifically to tissue glycolipids (asialo GM1 and asialo GM2) by solid phase binding assay on thin layer chromatograms. The **detection** limit was around 400 pmol of the glycolipids. Acid phosphatase purified from the **culture** filtrate of B. pseudomallei was tested for such binding properties, and the same results were obtained. According to our previous studies, the enzyme is a

glycoprotein located on the cell surface, and hydrolysed tyrosine phosphate most actively among the substrates so far tested. The mode of binding between the enzyme and the glycolipids was analyzed by comparison of binding levels among three samples different in protein content, sugar content and specific phosphatase activities per protein and sugar residue. The results suggested the possibility of a receptor-ligand relationship between the **bacterial enzyme** and the host-cell glycolipids (asialo GM).

L7 ANSWER 22 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1998:226659 BIOSIS
DOCUMENT NUMBER: PREV199800226659
TITLE: Use of 13C nuclear magnetic resonance to assess fossil fuel biodegradation: Fate of (1-13C)acenaphthene in creosote polycyclic aromatic compound mixtures degraded by bacteria.
AUTHOR(S): Selifonov, Sergey A. (1); Chapman, Peter J.; Akkerman, Simon B.; Gurst, Jerome E.; Bortiatynski, Jacqueline M.; Nanny, Mark A.; Hatcher, Patrick G.
CORPORATE SOURCE: (1) Maxygen Inc., 3140 Central Expressway, Santa Clara, CA 95051 USA
SOURCE: Applied and Environmental Microbiology, (April, 1998) Vol. 64, No. 4, pp. 1447-1453.
ISSN: 0099-2240.
DOCUMENT TYPE: Article
LANGUAGE: English
TI Use of 13C nuclear magnetic resonance to assess fossil fuel biodegradation: Fate of (1-13C)acenaphthene in creosote polycyclic aromatic compound mixtures degraded by bacteria.
SO Applied and Environmental Microbiology, (April, 1998) Vol. 64, No. 4, pp. 1447-1453.
ISSN: 0099-2240.
AU Selifonov, Sergey A. (1); Chapman, Peter J.; Akkerman, Simon B.; Gurst, Jerome E.; Bortiatynski, Jacqueline M.; Nanny, Mark A.; Hatcher, Patrick G.
AB (1-13C)acenaphthene, a tracer compound with a nuclear magnetic resonance (NMR)-active nucleus at the C-1 position, has been employed in conjunction with a standard broad-band-decoupled 13C-NMR spectroscopy technique to study the biodegradation of acenaphthene by various **bacterial cultures** degrading aromatic hydrocarbons of creosote. Site-specific labeling at the benzylic position of acenaphthene allows 13C-NMR **detection** of chemical changes due to initial oxidations catalyzed by **bacterial enzymes** of aromatic hydrocarbon catabolism. Biodegradation of (1-13C)acenaphthene in the presence of naphthalene or creosote polycyclic aromatic compounds (PACs) was examined with an undefined mixed **bacterial culture** (established by enrichment on creosote PACs) and with isolates of individual naphthalene- and phenanthrene-degrading strains from this **culture**. From 13C-NMR spectra of extractable materials obtained in time course biodegradation experiments under optimized conditions, a number of signals were assigned to accumulated products such as 1-acenaphthenol, 1-acenaphthenone, acenaphthene-1,2-diol and naphthalene 1,8-dicarboxylic acid, formed by benzylic oxidation of acenaphthene and subsequent reactions. Limited degradation of acenaphthene could be attributed to its oxidation by naphthalene 1,2-dioxygenase or related dioxygenases, indicative of certain limitations of the undefined mixed **culture** with respect to acenaphthene catabolism. Coinoculation of the mixed **culture** with cells of acenaphthene-grown strain Pseudomonas sp. strain A2279 mitigated the accumulation of partial transformation products and resulted in more complete degradation of acenaphthene. This study demonstrates the value of the stable isotope labeling approach and its ability to reveal incomplete mineralization even when as little as 2 to 3% of the substrate is incompletely oxidized, yielding products of partial transformation. The approach outlined may prove useful in assessing bioremediation performance.

L7 ANSWER 23 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1997:390562 BIOSIS
DOCUMENT NUMBER: PREV199799689765
TITLE: Growth kinetics, nutrient uptake, and expression of the Alcaligenes eutrophus poly(beta-hydroxybutyrate) synthesis pathway in transgenic maize cell suspension cultures.
AUTHOR(S): Hahn, J. J.; Eschenlauer, Arthur C.; Narrol, Matt H.; Somers, David A.; Srienc, Friedrich (1)
CORPORATE SOURCE: (1) 240 Gortner Lab., 1479 Gortner Ave., St. Paul, MN 55108 USA
SOURCE: Biotechnology Progress, (1997) Vol. 13, No. 4, pp. 347-354. ISSN: 8756-7938.
DOCUMENT TYPE: Article
LANGUAGE: English
TI Growth kinetics, nutrient uptake, and expression of the Alcaligenes eutrophus poly(beta-hydroxybutyrate) synthesis pathway in transgenic maize cell suspension cultures.
SO Biotechnology Progress, (1997) Vol. 13, No. 4, pp. 347-354. ISSN: 8756-7938.
AU Hahn, J. J.; Eschenlauer, Arthur C.; Narrol, Matt H.; Somers, David A.; Srienc, Friedrich (1)
AB Transgenic suspension **cultures** of Black Mexican Sweet maize (Zea mays L.) expressing the Alcaligenes eutrophus genes encoding enzymes of the pathway for biosynthesis of the biodegradable polymer poly(beta-hydroxybutyrate) (PHB) were established as a tool for investigating metabolic regulation of the PHB pathway in plant cells. **Cultures** were grown in a 2 L modified mammalian cell bioreactor and in shake flasks. Biomass doubling times for transgenic bioreactor **cultures** (3.42+-0.76 days) were significantly higher than those for untransformed **cultures** (2.01+-0.33 days). Transgenic expression of the **bacterial enzymes** beta-ketothiolase (0.140 units/mg protein) and acetoacetyl-CoA reductase (0.636 units/mg protein) was detected by enzyme assays and immunoblots. However, over the first 2 years of cultivation, reductase activity decreased to 0.120 units/mg protein. Furthermore, the PHB synthase gene, although initially present, was not detectable after 1.5 years of cultivation in suspension **culture**. These facts suggest that transgenic expression of PHB pathway genes in plant cells may not be stable. A hydroxybutyrate derivative was detected via gas chromatography even after 4 years of cultivation. Although the method used to prepare samples for gas chromatography cannot directly distinguish among PHB polymer, hydroxybutyryl-CoA (HB-CoA), and hydroxybutyric acid, solvent washing experiments indicated that most or all of the signal was non-polymeric, presumably HB-CoA. The synthesis of HB-CoA appeared to be linked to substrate growth limitation, with HB-CoA accumulation increasing dramatically and cell growth ceasing upon depletion of ammonium. This suggests that the PHB synthesis pathway in plants is subject to regulatory mechanisms similar to those in prokaryotic cells.

L7 ANSWER 24 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1996:157208 BIOSIS
DOCUMENT NUMBER: PREV199698729343
TITLE: Interest of the use of media with chromogenic substrates for the identification and the enumeration of urinary microorganisms.
AUTHOR(S): Martin, C. (1); Orenga, S.; Doleans, F.; Denis, F. (1)
CORPORATE SOURCE: (1) Lab. Bacteriol.-Virol.-Hyg. Hosp., CHU Dupuytren, 2 avenue Martin Luther-King, 87042 Limoges Cedex France
SOURCE: Pathologie Biologie, (1995) Vol. 43, No. 9, pp. 749-753. ISSN: 0369-8114.
DOCUMENT TYPE: Article
LANGUAGE: French
SUMMARY LANGUAGE: French; English

TI Interest of the use of media with chromogenic substrates for the identification and the enumeration of urinary microorganisms.
SO Pathologie Biologie, (1995) Vol. 43, No. 9, pp. 749-753.
ISSN: 0369-8114.
AU Martin, C. (1); Orenga, S.; Doleans, F.; Denis, F. (1)
AB Performance in terms of enumeration, growth and identification with a new **culture** medium (CPS ID2, bioMerieux) was evaluated using 405 urine samples and 244 collection strains. The CPS ID2 medium contains chromogenic substrates enabling the **detection** of 4 **bacterial enzymes** which leads to the identification of colonies: Escherichia coli, Proteus mirabilis, Proteus-Morganella-Providencia and enterococci. No discrepancies in the enumeration were observed with the collected strains and urine samples. Sensibility and specificity of the identification of Proteae taxa (TDA +) and enterococcal taxa (Gram positive cocci and beta-glucosidase +) was 100% using urine samples and 95.1% of E. coli strains (beta-glucuronidase +, indole +) are detected. Routine use of this new medium for the **bacterial** examination of urine is satisfactory and an ultra-violet lamp is no longer required for reading as was the case previously with media containing fluorogenic substrates.

L7 ANSWER 25 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1995:291778 BIOSIS
DOCUMENT NUMBER: PREV199598306078
TITLE: Biological process for the **detection** of 2,4-dichlorophenoxyacetic acid (2,4-D) in water.
AUTHOR(S): Bradley, Stephen N.; Gu, Yongxang; Knaebel, David B.; Korus, Roger A.; Crawford, Ronald L.
CORPORATE SOURCE: Univ. Idaho, Moscow, ID USA
SOURCE: Abstracts of the General Meeting of the American Society for Microbiology, (1995) Vol. 95, No. 0, pp. 434.
Meeting Info.: 95th General Meeting of the American Society for Microbiology Washington, D.C., USA May 21-25, 1995
ISSN: 1060-2011.
DOCUMENT TYPE: Conference
LANGUAGE: English
TI Biological process for the **detection** of 2,4-dichlorophenoxyacetic acid (2,4-D) in water.
SO Abstracts of the General Meeting of the American Society for Microbiology, (1995) Vol. 95, No. 0, pp. 434.
Meeting Info.: 95th General Meeting of the American Society for Microbiology Washington, D.C., USA May 21-25, 1995
ISSN: 1060-2011.
AU Bradley, Stephen N.; Gu, Yongxang; Knaebel, David B.; Korus, Roger A.; Crawford, Ronald L.

L7 ANSWER 26 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1992:76695 BIOSIS
DOCUMENT NUMBER: BA93:45150
TITLE: THE ACONITASE OF ESCHERICHIA-COLI PURIFICATION OF THE ENZYME AND MOLECULAR CLONING AND MAP LOCATION OF THE GENE ACN.
AUTHOR(S): PRODROMOU C; HAYNES M J; GUEST J R
CORPORATE SOURCE: KREBS INST. BIOMOL. RES., DEP. MOL. BIOL., UNIV. SHEFFIELD, PO BOX 594, FIRTH COURT, WESTERN BANK, SHEFFIELD S10 2UH, UK.
SOURCE: J GEN MICROBIOL, (1991) 137 (11), 2505-2516.
CODEN: JGMIAN. ISSN: 0022-1287.
FILE SEGMENT: BA; OLD
LANGUAGE: English
TI THE ACONITASE OF ESCHERICHIA-COLI PURIFICATION OF THE ENZYME AND MOLECULAR CLONING AND MAP LOCATION OF THE GENE ACN.
SO J GEN MICROBIOL, (1991) 137 (11), 2505-2516.
CODEN: JGMIAN. ISSN: 0022-1287.

AU PRODROMOU C; HAYNES M J; GUEST J R
AB The aconitase of Escherichia coli was purified to homogeneity, albeit in low yield (0.6%). It was shown to be a monomeric protein of Mr 95,000 or 97,500 by gel filtration and SDS-PAGE analysis, respectively. The N-terminal amino acid sequence resembled that of the Bacillus subtilis enzyme (citB product), but the similarity at the DNA level was insufficient to allow **detection** of the E. coli acn gene using a 456 bp citB probe. Phages containing the acn gene were isolated from a .lambda.-E. coli gene bank by immunoscreening with an antiserum raised against purified **bacterial enzyme**. The acn gene was located at 28 min (1350 kb) in the physical map of the E. coli chromosome by probing Southern blots with a fragment of the gene. Attempts to locate the gene using the same procedure with oligonucleotide probes encoding segments of the N-terminal amino acid sequence were complicated by the lack of probe specificity and an inaccuracy in the physical map of Kohara et al. (Cell 50, 495-508, 1987). Aconitase specific activity was amplified some 20-200-fold in **cultures** transformed with pGS447, a derivative of pUC119 containing the acn gene, and an apparent four-fold activation-deactivation of the phagemid-encoded enzyme was observed in late exponential phase. The aconitase antiserum cross-reacted with both the porcine and Salmonella typhimurium (Mr 120,000) enzymes.

L7 ANSWER 27 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1979:146000 BIOSIS
DOCUMENT NUMBER: BA67:26000
TITLE: RAPID **DETECTION** OF SELECTED GRAM NEGATIVE BACTERIA BY AMINO PEPTIDASE PROFILES.
AUTHOR(S): PETERSON E H; HSU E J
CORPORATE SOURCE: DEP. HEALTH EDUC. WELFARE-PUBLIC HEALTH SERV., NCMI, 240 HENNEPIN AVE., MINNEAPOLIS, MINN. 55401, USA.
SOURCE: J FOOD SCI, (1978) 43 (6), 1853-1856.
CODEN: JFDSAZ. ISSN: 0022-1147.
FILE SEGMENT: BA; OLD
LANGUAGE: English
TI RAPID **DETECTION** OF SELECTED GRAM NEGATIVE BACTERIA BY AMINO PEPTIDASE PROFILES.
SO J FOOD SCI, (1978) 43 (6), 1853-1856.
CODEN: JFDSAZ. ISSN: 0022-1147.
AU PETERSON E H; HSU E J
AB Selected gram-negative bacteria were differentiated by comparing profiles of their intracellular aminopeptidase activities. Aeromonas liquefaciens plus 14 species and serotypes of Enterobacteriaceae were used in the study. Substrates for the **bacterial enzymes** were 19 L-amino acid .beta.-naphthylamides. The .beta.-naphthylamines released by enzyme hydrolysis were determined for each amino acid by fluorometric analysis, and a profile for each **culture** was obtained in 4-6 h. The technique appears to be useful for differentiation of bacteria and for demonstrating relatedness.